*Information from the Division of Health Care Finance and Policy*

# FY06 Annual Acute Hospital Financial Report

*The financial health of the hospital industry remained relatively stable in Fiscal Year 2006 (FY06) compared with Fiscal Year 2005 (FY05). Overall profitability improved across the industry. Hospitals also demonstrated sustained improvements in liquidity, with a majority of hospitals comfortably able to meet short-term obligations. In addition, solvency improved for most of the industry; however, the ability to cover long-term obligations remained a serious concern for one-third of Massachusetts hospitals.*

## About this Report

The Division of Health Care Finance and Policy (the Division) publishes quarterly and annual acute hospital financial reports in response to a legislative mandate to provide an annual assessment of financial trends in the acute care hospital industry. Quarterly reporting is one part of the Division's ongoing program to protect the public interest by continuously monitoring the financial condition of acute care hospitals. This report presents an industry-wide analysis of audited data from FY02 through FY06.[1] Financial trends for individual hospitals are on each hospital's Fact Sheet in the Division's Data Catalog at www.mass.gov/dhcfp.

Trends in financial ratio analysis can provide useful information about the hospital industry's financial condition. The three areas examined on a quarterly and annual basis are profitability, liquidity, and solvency.[2] In addition, we present comparisons of these three areas by hospital teaching status.

## Profitability

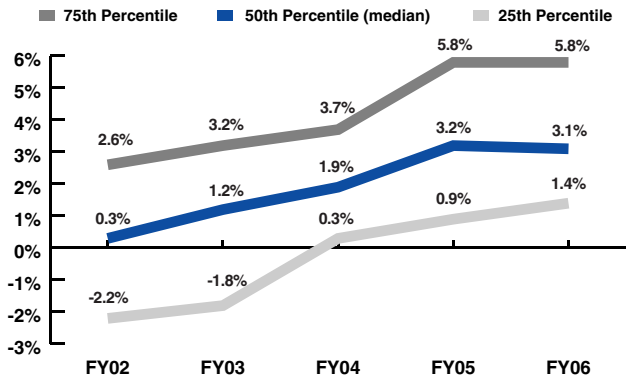
Although most Massachusetts acute care hospitals are non-profit, they need to generate a sufficient surplus in order to fulfill their missions, repay debt, and invest in the future of their organizations. Therefore, an analysis of the industry's profitability using three key ratios is reported here. Figures 1, 2, and 3 show FY02 through FY06 trends for 25th, 50th (median) and 75th quartile values[3] for Total Margin,[4] Operating Margin,[5] and Non-operating Margin.[6]

Total profitability was stable across all three quartiles in FY06, with a slight improvement in the lowest margin hospitals. Most hospitals (86%) experienced positive total margins (up from 80% in FY05). Operating margins showed a moderating positive trend compared with the previous two years across all quartiles, with 78% (versus 71% in FY05) reporting operating gains, and 22% (versus 29% in FY05) reporting operating losses. Non-operating margins showed a slight decline across two of the three quartiles, with 94% of hospitals (versus 95% in FY05) experiencing non-operating gains, and 6% (versus 5% in FY05) experiencing non-operating losses. The decreases in the upper and middle quartiles between FY05 and FY06 may have resulted from some hospitals transferring investments to their parent company.

## Liquidity

Liquidity ratios indicate a hospital's ability to meet its short-term obligations. Deterioration of these ratios is one indica-

**Figure 1**
**Total Margin Trend, FY02-FY06**




- **Overall profitability remained stable across all three quartiles in FY06, with 86% of hospitals experiencing total gains in FY06 compared with 80% in FY05.**



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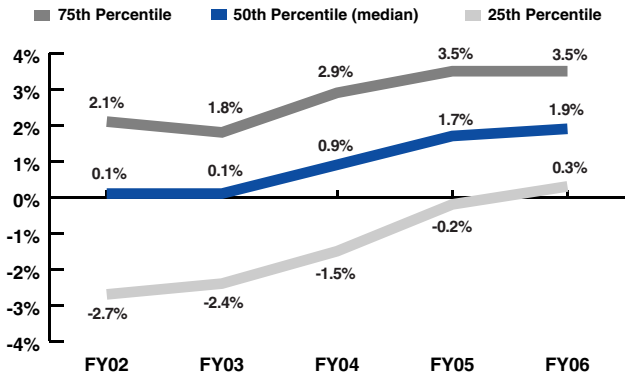
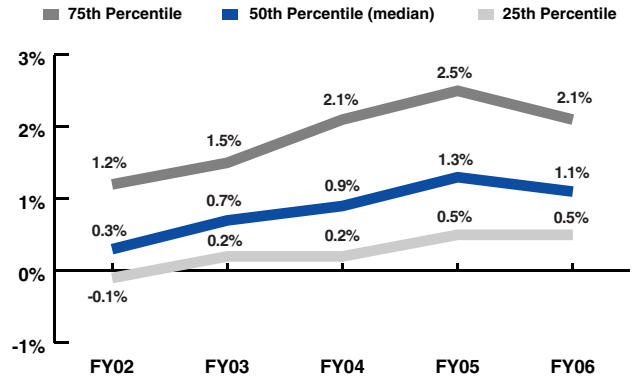
## Figure 2
### Operating Margin Trend, FY02-FY06



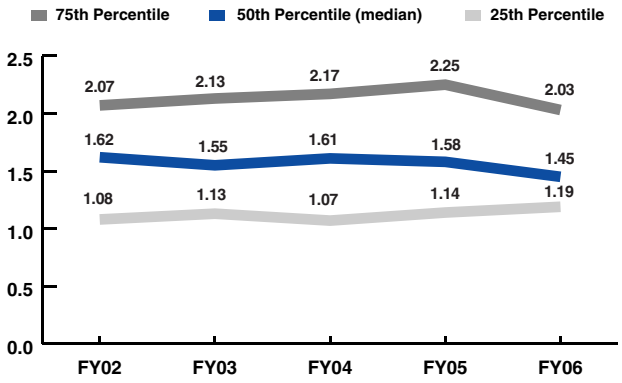

- **Operating performance continued to improve across the industry in FY06, with 78% of hospitals experiencing operating gains compared with 71% in FY05.**

## Figure 3
### Non-operating Margin Trend, FY02-FY06



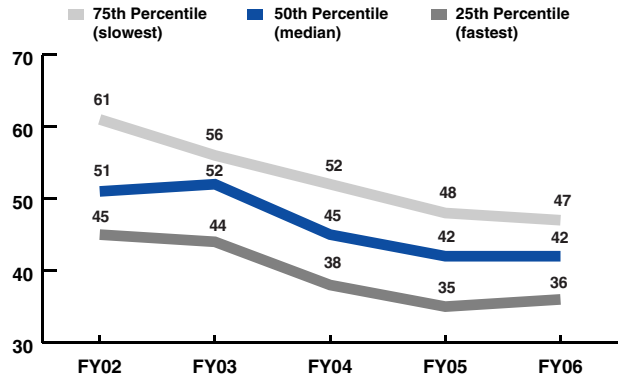

- **Non-operating Margin declined in two of three quartiles in FY06, with 94% of hospitals experiencing non-operating gains versus 95% in FY05.**

## Figure 4
### Current Ratio Trend, FY02-FY06




- **Current Ratio declined for the upper and middle quartiles, and increased slightly for the lower quartile. A majority of hospitals (84%) continued to maintain Current Ratios above the 1.0 benchmark in FY06.**

## Figure 5
### Days in Accounts Receivable Trend, FY02-FY06



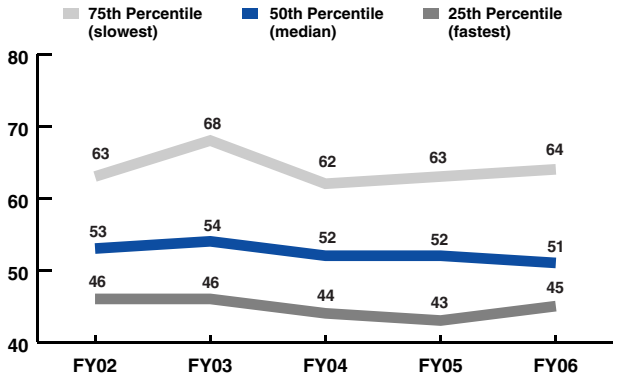

- **Days in Accounts Receivable remained stable across all three quartiles in FY06. From FY04 through FY06 hospital revenue collection improved steadily.**

tion of financial stress. Three liquidity ratios are reported here: Current Ratio,[7] Average Days in Accounts Receivable (A/R),[8] and Average Payment Period.[9] Figures 4, 5, and 6 show trends in quartile values for these three ratios.

Across the hospital industry, short-term liquidity remained fairly stable in FY06 compared with FY05, with some shifting among specific hospitals. The lower quartile showed a slight improvement in the Current Ratio, with the upper and middle quartiles declining. Although these two quartiles decreased, most hospitals (84% in FY06 compared with 86% in FY05) continued to show values at or above the industry benchmark value of 1 (see Figure 4).[10] The acute hospital industry continued a trend towards more efficient management of Days in A/R (see Figure 5) and stability in the average time taken to pay current liabilities, (Average Payment Period, see Figure 6) across all quartiles.

**Figure 6**

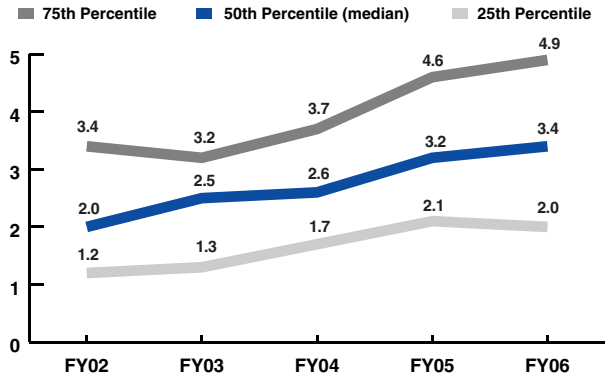
**Average Payment Period Trend in Days, FY02-FY06**




- **Average Payment Period increased by one day in the upper quartile, decreased one day in the middle quartile, and increased two days in the lower quartile**.

**Figure 7**

**Debt Service Coverage Total Trend, FY02-FY06**




- **Debt Service Coverage in general continued a positive trend in FY06, with a minor decline in the lower quartile.**

## Solvency

Solvency ratios provide information regarding both how an organization finances its assets and how able an organization is to take on new debt. Deterioration of these ratios is another indication of problems in the financial health of an organization. Three solvency ratios are reported: Debt Service Coverage,[11] Cash Flow to Total Debt,[12] and Equity Financing.[13] Figures 7, 8, and 9 show trends in quartile values for these three ratios.

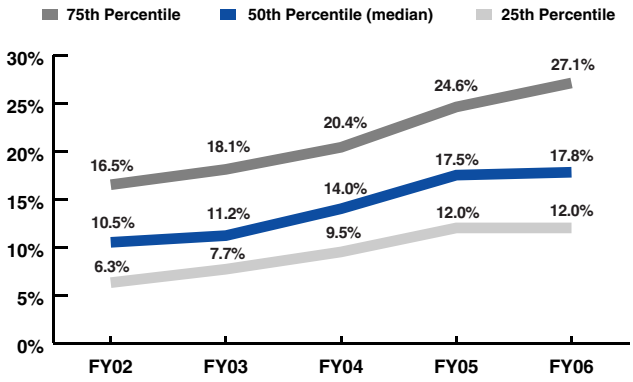
Debt Service Coverage measures a hospital's ability to meet principal and interest payments in the upcoming year. In general, the hospital industry continued to improve Debt Service Coverage ratios in FY06, with the lowest quartile showing a very minor decline. All but two hospitals showed positive ratios, and all quartiles remained above the 1.5 benchmark. Further, only nine hospitals exhibited Debt Service Coverage ratios below the 1.5 benchmark (see Figure 7).

Cash Flow to Total Debt is the measure of a hospital's percentage of cash flow to current and long-term debt obligations and is an indicator of the potential for future financial distress and insolvency. This solvency indicator improved or remained stable across all quartiles in FY06 (see Figure 8). Improvement in this ratio was found mostly in the top quartile and is attributable to overall profitability for financially stronger hospitals in the industry during FY06.

The Equity Financing ratio, measured by the proportion of total assets financed by equity, reflects the ability of a hospital to take on more debt. Low values indicate that a hospital is highly leveraged, and therefore, may have difficulty securing access to debt financing for further asset acquisition. Equity Financing remained fairly stable in FY06 compared with previous years. Just over 71% of the industry was above the 30% benchmark in FY06 compared with 68% in FY05, and long-term solvency remained favorable for this group. However, this ratio was below the 30% industry benchmark for the other 29% of the hospitals, indicating potential long-term solvency issues for this group (see Figure 9).

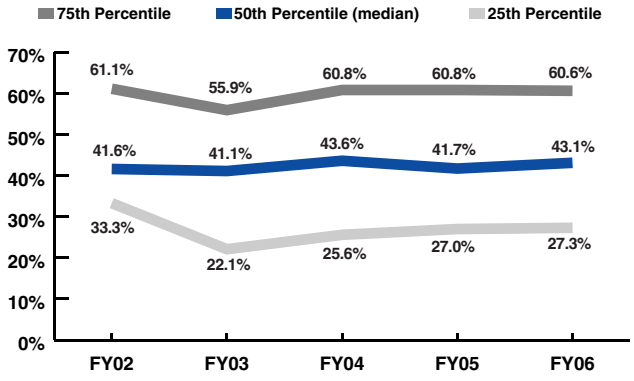
**Figure 8**

**Cash Flow to Total Debt Trend, FY02-FY06**




- **Cash Flow to Total Debt improved or remained stable across all quartiles in FY06. Improvements were largely due to the financial strength in upper quartile hospitals.**

**Figure 9**
**Equity Financing Trend, FY02-FY06**




- **Equity Financing Ratios improved or remained stable in FY06. However, twenty-nine percent of the hospitals were below the 30% benchmark and this highly leveraged position may make future asset acquisition difficult for this group of hospitals.**

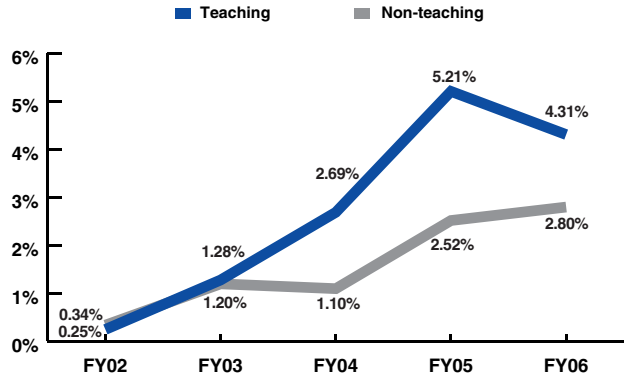
## Teaching versus Non-teaching Hospitals[14]

The Division of Health Care Finance and Policy also examines the financial health of teaching and non-teaching hospitals using financial ratio analysis. Overall, teaching hospitals outperformed non-teaching hospitals across the three quartiles in terms of profit levels, and a slightly higher percentage of teaching hospitals (87%) versus non-teaching hospitals (85%) generated a total surplus. In terms of operating margin, teaching hospitals continued to demonstrate higher levels of performance across the three quartiles, with a slightly higher percentage of teaching hospitals (80%) versus non-teaching hospitals (77%) experiencing an operating surplus in FY06. The difference in financial strength between teaching and non-teaching hospitals was clearly demonstrated in non-operating margin; the upper quartile of teaching hospitals reported non-operating margins of about 5% or greater compared with 1.7% or greater for the upper quartile of non-teaching hospitals. In both cases, only two teaching and two non-teaching hospitals showed a negative non-operating margin in FY06.

The median operating margin steadily improved for both teaching and non-teaching hospitals between FY04 and FY06. However, median total and non-operating margins fluctuated during this same period. This fluctuation may have resulted from an FY05 change in accounting practice for alternative investments. This change now requires hospitals to report certain unrealized gains and losses as part of non-operating income. The sharp increase in the median non-operating and total margins for teaching hospitals between FY04 and FY05 illustrates one result of this change. The decrease in median non-operating and total margins between FY05 and FY06 may have resulted from some hospitals moving investments to their parent company. Figures 10, 11, and 12 show these trends.

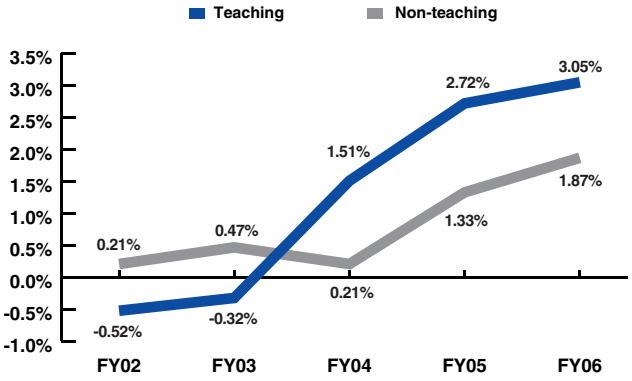
Results between the two groups were mixed with regard to liquidity. On average, Current Ratio was consistent for both teaching and non-teaching hospitals; however, a higher percentage of non-teaching hospitals had Current Ratios above

**Figure 10**
**Median Total Margin Trend, FY02-FY06**



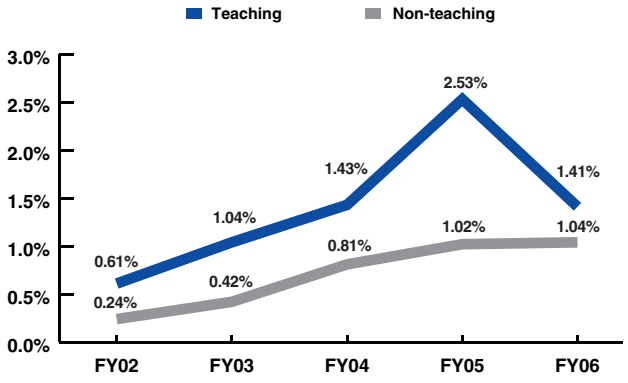

- **Reporting of investments affected teaching hospitals' total margin.**

**Figure 11**
**Median Operating Margin Trend, FY02-FY06**




- **Teaching and non-teaching hospitals have shown consistent improvement in operating margin since FY04.**

**Figure 12**
**Median Non-operating Margin Trend, FY02-FY06**




- **Reporting of investments affected teaching hospitals' non-operating margin.**

the minimum industry benchmark of 1.0 (87% of non-teaching compared with 73% of teaching hospitals). In terms of collecting accounts receivables, the results were also fairly consistent with similar values across two of the three quartiles. Only the lower quartile of teaching hospitals reported slightly lower days in A/R than non-teaching hospitals (34.7 days versus 36.4 days) in FY06. Non-teaching hospitals were more likely to pay current obligations in a shorter time frame, with lower Average Payment Period values across all quartiles.

In terms of solvency, teaching hospitals were generally more solvent. A higher percentage of non-teaching hospitals—17% versus 7% for teaching hospitals—will have more difficulty meeting interest and principal payments in the upcoming year. In addition, teaching hospitals performed better in terms of repaying current and non-current debt for the lower and middle quartiles, while non-teaching hospitals outperformed the teaching hospitals in the upper quartile. However, teaching hospitals were substantially less leveraged as 80% (versus 69% of non-teaching hospitals) were above the 30% benchmark for Equity Financing.

## Summary

Overall the hospital industry remained financially stable during FY06. The majority of hospitals reported positive overall profitability in FY06, with 86% experiencing total gains. On a positive note, improvements in profitability resulted primarily in operating margin performance versus some declining performance in non-operating margin. Although the industry demonstrated a slight decline in liquidity, in general hospitals continued a trend of improving collection periods, and payment periods remained stable. A majority of hospitals were comfortably able to meet short-term obligations. In addition, solvency improved for most of the industry with upward trends in both debt service coverage and cash flow to total debt ratios; however, the ability to secure access to debt financing for further asset acquisition remained a serious concern for 29% of Massachusetts hospitals.

Financial ratios for each acute hospital are on the Hospital Fact Sheets in the Division of Health Care Finance and Policy's Data Catalog at www.mass.gov/dhcfp. Hospital-specific dollar surplus or loss, net patient service revenue, total net assets, and assets whose use is limited are also provided on the Fact Sheets. This additional information illustrates the magnitude of hospital surplus and loss, the size of operation, and the size of reserves.

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[1] The findings in this report are based on the financial filings of 63 acute care hospitals. Most hospitals have a fiscal year ending September 30. Cambridge Health Alliance, Metrowest Medical Center and St. Vincent Hospital have a fiscal year ending on June 30. Martha's Vineyard Hospital's fiscal year ends on March 31. Data for Mercy Medical Center were not yet submitted because their fiscal year ends later (on December 31). Nantucket Cottage Hospital and Quincy Medical Center did not submit data in time to be included in this report.

[2] Depending on the organization of each hospital, data may exclude other aspects of some hospitals' financial health, such as performance of endowments or the financial health of parent or other affiliated organizations.

[3] Quartile values can shed light on information about the distribution of financial ratio values across hospitals. Often, averages can be materially affected by outlier/extreme values at the low and high ends of a distribution. Examining quartiles, therefore, is a preferred means of assessing the overall distribution of values across hospitals. For instance, the ratio values of one-quarter of the hospitals at the lower end of the distribution will fall at or below the 25th quartile value. Similarly, the ratio values of one-quarter of the hospitals at the upper end of the distribution will fall at or above the 75th quartile value. The 50th percentile is the median of the distribution of values. Half of the hospitals' financial ratio values will fall below the median, and half will fall above the median. These quartile measures are particularly useful when a distribution is markedly skewed, or where it is generally symmetrical but includes a few outliers.

[4] Ratio of total income to total revenue.

[5] Ratio of operating income to total revenue.

[6] Ratio of non-operating income to total revenue.

[7] Ratio of current assets to current liabilities.

[8] Ratio of net patient accounts receivable to net patient service revenue/quarters of data * 91.25.

[9] Ratio of current liabilities less estimated third-party settlements to total expenses less depreciation and amortization/quarters of data * 91.25.

[10] A Current Ratio value of 1.0 indicates that a hospital has one dollar held in current assets per dollar of current liabilities. Values below 1.0 are considered strongly unfavorable and highlight an organization's illiquid position.

[11] Ratio of total income plus interest expense plus depreciation and amortization to interest expense plus current portion of long-term debt.

[12] Ratio of total income plus depreciation and amortization to total current liabilities plus total long-term debt.

[13] Ratio of total net assets to total assets.

[14] According to the Medicare Payment Advisory Commission (MEDPAC), a major teaching hospital has at least 25 FTE residents per 100 inpatient beds. For this report, teaching status was determined according to the MEDPAC definition and was based on FY05 hospital cost report data submitted to the Division by the hospitals.



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